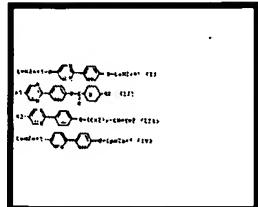


Liq. crystal mixt. used as matrix for ferroelectric liq. crystal - contains 2 5-alkoxy-2-(4-alkoxyphenyl)-pyrimidine cpds.

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Accession / Update: 1989-087286 / 198912

IPC Code: C09K 19/34 ; G02F 1/13 ;

Derwent Classes: E13; L03; P81; U11; V07;

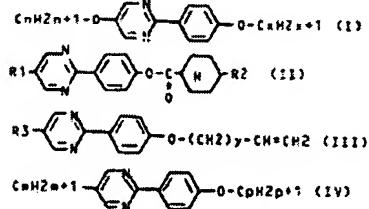
Manual Codes: E07-D12(Pyrimidine), L03-D01D2(Liquid crystal material mixtures), U11-A03(Liquid crystal, electrochromic materials), V07-K(Controlling light)

Derwent Abstract (EP0307880A) Liquid crystal mixt. contains at least two 5-alkoxy-2-(4-alkoxy-phenyl)-pyrimidines, with linear alkyl gps., of formula (I), where n = 6-14; x = 2-14.

DERWENT RECORD : In the mixt., n is constant and pref. = 7-14; and the values of x differ by at least 2. The mixt. pref. contains 20-90 (mole-%) (I) and pref. also 2-40% cyclohexanecarboxylate ester(s) of formula (II), 10-35% alkenyloxy-phenyl-pyrimidine deriv(s). of formula (III) and/or 10-25% alkyl-pyrimidine-alkoxy-phenyl deriv(s). of formula (IV). In the formulae R1 = 10-16C alkyl or 7-14C alkoxy; R2 = 2-9C alkyl; R3 = 7-16C alkyl or 6-14C alkoxy; y = 4-14; m and p independently = 6-14. USE/Advantage - The mixts. are claimed for use as matrix for ferroelectric liquid crystal mixts., which also contain an optically active dopant and in electro-optical devices. They have favourable optical and dielectric anisotropy and a wide enough nematic phase for practical applications, esp. a low m.pt. low transition point of the lower limit of the SC phase and a much wider SC phase than that obtd. using the corres. 5-alkyl-2-(4-alkoxy-phenyl) pyrimidine cpds.. They can give ferroelectric liquid crystal mixts. with short switching time with the phase sequence isotropic to nematic to smectic A, smectic C in which the pitch in the nematic phase is over 15 microns and in the S asterisk c phase over 5 microns, with a negative dielectric anisotropy and optical anisotropy less than 0.15.

Abstract info: EP0307880A: Dwg.0/0 , EP0307880B: Dwg.0/0 , US5071589:

Images:



| Family: | Patent | Pub. Date | DW Update | Pages | Language | IPC Code |
|---------------------|--------|----------------|-----------|-------|----------|------------|
| <u>EP0307880A</u> * | | March 22, 1989 | 198912 | 22 | German | C09K 19/34 |

Des. States: (R) AT BE CH DE FR GB IT LI NL SE

Local appls.: EP1988000115003 ApplDate:1988-09-14 (88EP-0115003)

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|---------------------|---------------|--------|--|--------|------------|
| <u>DE3887048G</u> = | Feb. 24, 1994 | 199409 | | German | C09K 19/34 |
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Local appls.: Based on EP00307880 (EP 307880)

EP1988000115003 ApplDate:1988-09-14 (88EP-0115003)

DE1988003887048 ApplDate:1988-09-14 (88DE-3887048)

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| <u>EP0307880B1</u> = | Jan. 12, 1994 | 199403 | 25 | German | C09K 19/34 |
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Des. States: (R) AT BE CH DE FR GB IT LI NL SE

Local appls.: EP1988000115003 ApplDate:1988-09-14 (88EP-0115003)

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| <u>US5071589</u> = | Dec. 10, 1991 | 199201 | 11 | English | C09K 19/34 |
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Local appls.: US1988000245408 ApplDate:1988-09-16 (88US-0245408)

JP1096285A = April 14, 1989 198921 English C02F 3/00

Local appls.: JP1988000230221 ApplDate:1988-09-16 (88JP-0230221)

NO8804137A = April 10, 1989 198920 NO_NO

Local appls.:

DE3831226A = March 30, 1989 198914 German C09K 19/34

Local appls.: DE1988003831226 ApplDate:1988-09-14 (88DE-3831226)

Priority Number:

| Application Number | Application Date | Original Title |
|--------------------|------------------|----------------|
| DE1987003731640 | Sept. 19, 1987 | |

Citations: [EP0293910](#) : LIQUID CRYSTAL COMPOSITION AND LIQUID CRYSTAL DEVICE CONTAINING SAME
[EP0308794](#) : LIQUID CRYSTAL PHENYL PYRIMIDINE ESTER OF CYCLOHEXANE-CARBOXYLIC ACID WITH A SMECTIC PHASE, PROCESS FOR ITS PREPARATION AND ITS USE IN LIQUID CRYSTAL MIXTURES
[WO8604060](#) : PYRIMIDINES
- A3...199012
- No-SR.Pub

Related Accessions:

| Accession Number | Type | Derwent Update | Derwent Title |
|------------------|------|----------------|---------------|
| C1989-038598 | C | | |
| N1989-066582 | N | | |
| 2 items found | | | |

Title Terms: LIQUID CRYSTAL MIXTURE MATRIX FERROELECTRIC LIQUID CRYSTAL CONTAIN ALKOXY ALKOXYPHENYL PYRIMIDINE COMPOUND

Index Terms: ALKOXYPHENYL

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